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Inventor Information for 10/796086

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| US 6707711 B2 | 20040316 | Magnetic memory with reduced write current | 365/158 | 257/E21.665; 257/E27.005; 365/173 | Saito; Yoshiaki et al. |
| US 6690553 B2 | 20040210 | Magnetoresistance effect device, magnetic head therewith, magnetic recording/reproducing head, and magnetic storing apparatus | 360/324.12 | 257/E21.665; 257/E27.005 | Iwasaki; Hitoshi et al. |
| US 6636399 B2 | 20031021 | Magnetoresistance effect device, magnetic head therewith, magnetic recording/reproducing head, and magnetic storing apparatus | 360/324.12 | 257/E21.665; 257/E27.005 | Iwasaki; Hitoshi et al. |
| US 6611405 B1 | 20030826 | Magnetoresistive element and magnetic memory device | 360/324.2 | 257/E21.665; 257/E27.005; 365/171; 365/173 | Inomata; Koichiro et al. |
| US 6605836 B2 | 20030812 | Magnetoresistance effect device, | 257/295 | 257/E21.665; 257/E27.005; | Kishi; Tatsuya et al. |

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| | | magnetic memory apparatus, personal digital assistance, and magnetic reproducing head, and magnetic information | | 324/252; 365/158; 365/171; 365/173; 428/212 | al. |
| US 6590803 B2 | 20030708 | Magnetic memory device | 365/158 | 365/171; 365/173 | Saito; Yoshiaki et al. |
| US 6556473 B2 | 20030429 | Magnetic memory with reduced write current | 365/158 | 257/E21.665; 257/E27.005; 365/173 | Saito; Yoshiaki et al. |
| US 6495275 B2 | 20021217 | Multi-layered thin-film functional device and magnetoresistance effect element | 360/324.11 | 360/324.12; 427/131; 427/548; 428/702; 428/816 | Kamiguchi; Yuzo et al. |
| US 6483673 B1 | 20021119 | Differential detection magnetoresistance head with laminated structure | 360/324.11 | | Iwasaki; Hitoshi et al. |
| US 6395388 B1 | 20020528 | Magnetoresistance effect element | 428/332 | 257/E43.004; 257/E43.005; 324/252; 428/336; 428/810; 428/811; 428/900 | Iwasaki; Hitoshi et al. |
| US 6369992 B1 | 20020409 | Yoke-type head with magneto-resistance effect film recessed from medium facing surface and extending across magnetic gap | 360/321 | 360/324.1 | Yoda; Hiroaki et al. |
| US 6368706 B1 | 20020409 | Magnetoresistance effect element | 428/332 | 257/E43.004; 324/252; 428/336; 428/810; 428/811.1; 428/900 | Iwasaki; Hitoshi et al. |
| US 6348274 B1 | 20020219 | Magnetoresistive element and magnetic recording apparatus | 428/811 | 360/313; 428/815; 428/900 | Kamiguchi; Yuzo et al. |
| US 6338899 B1 | 20020115 | Magnetoresistance effect element, magnetic head, | 360/324.12 | 324/252; 338/32R; 360/324.11; | Fukuzawa; Hideaki et al. |

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| | | magnetic head assembly, magnetic storage system | | 428/336; 428/811; 428/811.2; 428/900 | |
| US 6307708 B1 | 20011023 | Exchange coupling film having a plurality of local magnetic regions, magnetic sensor having the exchange coupling film, and magnetic head having the same | 360/126 | 360/321 | Yoda; Hiroaki et al. |
| US 6303218 B1 | 20011016 | Multi-layered thin-film functional device and magnetoresistance effect element | 428/332 | 360/313; 428/336; 428/811.2; 428/811.5; 428/816; 428/900 | Kamiguchi; Yuzo et al. |
| US 6285531 B1 | 20010904 | Magnetic head with magneto-resistance effect element disposed on opposite side of magnetic core pair from recording coil | 360/317 | 360/321 | Ohsawa; Yuichi et al. |
| US 6256863 B1 | 20010710 | Yoke type magnetoresistance head and manufacturing method of the same | 29/603.08 | 148/108; 360/317 | Saito; Kazuhiro et al. |
| US 6256171 B1 | 20010703 | Thin film magnetic head having an improved heat dispersion and magnetic recording apparatus using the same | 360/235.3 | 977/934 | Yoda; Hiroaki et al. |
| US 6172858 B1 | 20010109 | Thin film head | 360/313 | 29/603.03 | Yoda; Hiroaki et al. |
| US 6159593 A | 20001212 | Magnetoresistance effect element | 428/811.2 | 257/E43.004; 324/252; 428/336; 428/900 | Iwasaki; Hitoshi et al. |
| US 6157525 | 20001205 | Magnetic head | 360/324.12 | | Iwasaki; |

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| A | | | | | Hitoshi et al. |
| US 6146776 A | 20001114 | Magneto-resistance effect head | 428/811.3 | 324/252; 360/324.12; 428/900 | Fukuzawa; Hideaki et al. |
| US 6118624 A | 20000912 | Magneto-resistance effect element having a magnetic biasing film | 360/324.12 | 257/E43.004 | Fukuzawa; Hideaki et al. |
| US 6118621 A | 20000912 | Magnetoresistance effect head having a pair of protrusions, steps or depressions between the detecting and nondetecting areas for improved off-track characteristics | 360/327 | 360/322; 360/324.1 | Ohsawa; Yuichi et al. |
| US 6111729 A | 20000829 | Magnetoresistance effect element | 360/324.1 | | Kamiguchi; Yuzo et al. |
| US 6111722 A | 20000829 | Magnetoresistance effect element having improved biasing films, and magnetic head and magnetic recording device using the same | 360/324.12 | 257/E43.004 | Fukuzawa; Hideaki et al. |
| US 6088195 A | 20000711 | Magnetoresistance effect element | 360/324.12 | 257/E43.004 | Kamiguchi; Yuzo et al. |
| US 6069820 A | 20000530 | Spin dependent conduction device | 365/171 | 257/E27.103; 257/E43.004; 365/173 | Inomata; Koichiro et al. |
| US 6064552 A | 20000516 | Magnetoresistive head having magnetic yoke and giant magnetoresistive element such that a first electrode is formed on the giant magnetoresistive element which in turn is formed on the magnetic yoke which acts as a second electrode | 360/322 | 360/321 | Iwasaki; Hitoshi et al. |
| US 6052262 | 20000418 | Magneto-resistance | 360/324.12 | 257/E43.004 | Kamiguchi; |

| A | | effect element and magnetic head | | | Yuzo et al. |
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| US 6046891 A | 20000404 | Thin film head | 360/324.1 | | Yoda; Hiroaki et al. |
| US 6043515 A | 20000328 | Optical semiconductor device | 257/103 | 257/81; 257/97; 257/99; 372/106; 372/45.01; 372/70; 372/75 | Kamiguchi; Yuzo et al. |
| US 6038101 A | 20000314 | Magnetic head and method of manufacturing magnetic head | 360/235.2 | | Yoda; Hiroaki et al. |
| US 5999378 A | 19991207 | Magnetoresistance effect head having a giant magnetoresistance effect film | 360/324 | | Saito; Kazuhiro et al. |
| US 5991125 A | 19991123 | Magnetic head | 360/324.12 | | Iwasaki; Hitoshi et al. |
| US 5962905 A | 19991005 | Magnetoresistive element | 257/421 | 257/422; 257/423; 257/427; 257/E29.323; 257/E43.004; 257/E43.005 | Kamiguchi; Yuzo et al. |
| US 5949622 A | 19990907 | Magnetoresistance effect element | 360/324.12 | 257/E43.004 | Kamiguchi; Yuzo et al. |
| US 5946167 A | 19990831 | Magnetoresistive sensor having lead and/or bias layer structure contributing to a narrow gap | 360/322 | | Hara; Michiko et al. |
| US 5912790 A | 19990615 | Thin film magnetic recording-reproducing head having a high recording density and high fidelity | 360/322 | 360/122; 360/317 | Yoda; Hiroaki et al. |
| US 5905611 A | 19990518 | Thin film magnetic head responsive to spin-dependent | 360/324.1 | | Yoda; Hiroaki et al. |

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| | | scattering | | | |
| US 5896251 A | 19990420 | Magnetoresistance effect head with conductor film pair and magnetic field proving film pair disposed between substrate and magnetoresistance effect film | 360/324 | | Ohsawa; Yuichi et al. |
| US 5828525 A | 19981027 | Differential detection magnetoresistance head | 360/314 | | Iwasaki; Hitoshi et al. |
| US 5818684 A | 19981006 | Shield type magnetoresistive head arranged for weakening of a galvano-current magnetic field | 360/319 | | Iwasaki; Hitoshi et al. |
| US 5796560 A | 19980818 | Magnetoresistive head | 360/324 | | Saito; Kazuhiro et al. |
| US 5780176 A | 19980714 | Magnetoresistance effect element | 428/811.2 | 257/E43.004; 257/E43.005; 324/252; 360/324.11; 360/327.32; 428/610; 428/670; 428/675; 428/676; 428/678; 428/900 | Iwasaki; Hitoshi et al. |
| US 5777542 A | 19980707 | Magnetoresistance effect device and manufacturing method thereof | 338/32R | 257/E43.004; 29/603.08; 360/320 | Ohsawa; Yuichi et al. |
| US 5773156 A | 19980630 | Magnetoresistance effect element | 428/611 | 257/E43.005; 338/32R; 360/324; 428/546; 428/620; 428/641 | Inomata; Koichiro et al. |
| US 5768066 A | 19980616 | Magnetoresistive head having an antiferromagnetic | 360/314 | | Akiyama; Junichi et al. |

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| | | layer interposed between first and second magnetoresistive elements | | | |
| US 5756191 A | 19980526 | Exchange coupling film and magnetoresistance effect element | 428/209 | 257/E43.005; 324/252; 360/327.32; 428/688 | Hashimoto; Susumu et al. |
| US 5738946 A | 19980414 | Magnetoresistance effect element | 428/811.2 | 257/E43.004; 257/E43.005; 324/252; 360/324.1; 428/615; 428/652; 428/668; 428/670; 428/671; 428/900; 428/928 | Iwasaki; Hitoshi et al. |
| US 5725963 A | 19980310 | Magnetoresistance effect element | 428/811.2 | 257/E43.004; 257/E43.005; 324/252; 360/324.12; 428/622; 428/627; 428/629; 428/632; 428/639; 428/641; 428/660; 428/667; 428/670; 428/678; 428/900; 428/928 | Iwasaki; Hitoshi et al. |
| US 5702832 A | 19971230 | Magnetoresistance effect element | 428/611 | 257/E43.004; 257/E43.005; 324/252; 360/324.1; 428/622; 428/627; 428/629; 428/632; 428/639; 428/641; | Iwasaki; Hitoshi et al. |

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| | | | | 428/660; 428/667; 428/670; 428/678; 428/811.2; 428/900; 428/928 | |
| US 5700588 A | 19971223 | Magnetoresistance effect element | 428/611 | 257/E43.005; 428/635; 428/670; 428/673; 428/675; 428/928 | Saito; Yoshiaki et al. |
| US 5698335 A | 19971216 | Magnetoresistance effect element having bias films | 428/611 | 257/E43.004; 257/E43.005; 324/252; 360/324.1; 428/622; 428/627; 428/629; 428/632; 428/639; 428/641; 428/660; 428/667; 428/670; 428/678; 428/811.2; 428/900 | Iwasaki; Hitoshi et al. |
| US 5688605 A | 19971118 | Magnetoresistance effect element | 428/811.2 | 257/E43.004; 257/E43.005; 324/252; 360/324.1; 428/622; 428/668; 428/671; 428/672; 428/673; 428/674; 428/675; 428/928 | Iwasaki; Hitoshi et al. |
| US 5616370 A | 19970401 | Artificial multilayer and method of manufacturing the same | 427/547 | 204/192.2; 257/E43.005; 427/128; 427/130; 427/131; | Okuno; Shiho et al. |

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| | | | | 427/598 | |
| US 5607781 A | 19970304 | Oxide film with preferred crystal orientation, method of manufacturing the same, and magneto- optical recording medium | 428/822.1 | 204/192.1; 204/192.11; 204/192.14; 204/192.15; 204/192.2; 204/192.26; 252/62.51C; 252/62.51R; 252/62.56; 369/13.35; 427/128; 427/595; 427/599; 428/702; 428/900 | Okuno; Shiho et al. |
| US 5587026 A | 19961224 | Ferromagnetic film | 148/313 | 420/435 | Iwasaki; Hitoshi et al. |
| US 5585199 A | 19961217 | Magnetoresistance effect head | 428/621 | 360/324; 428/611; 428/928 | Kamiguchi; Yuzo et al. |
| US 5585196 A | 19961217 | Magnetoresistance effect element | 428/811.3 | 257/E43.005; 360/126; 360/324; 428/336; 428/402; 428/558; 428/561; 428/611; 428/615; 428/671; 428/675; 428/900 | Inomata; Koichiro et al. |
| US 5578385 A | 19961126 | Magnetoresistance effect element | 428/611 | 257/E43.005; 428/635; 428/670; 428/673; 428/675; 428/928 | Saito; Yoshiaki et al. |
| US 5576915 A | 19961119 | Magnetoresistive head with antiferromagnetic sublayers interposed between first and second spin-valve | 360/314 | | Akiyama; Junichi et al. |

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| | | units to exchange bias inner magnetic films thereof | | | |
| US 5552949 A | 19960903 | Magnetoresistance effect element with improved antiferromagnetic layer | 360/327.32 | 257/E43.004; 324/252; 338/32R | Hashimoto; Susumu et al. |
| US 5549978 A | 19960827 | Magnetoresistance effect element | 428/811.2 | 257/E43.004; 257/E43.005; 324/252; 360/324.1; 428/611; 428/622; 428/627; 428/629; 428/632; 428/639; 428/641; 428/660; 428/667; 428/670; 428/678; 428/900 | Iwasaki; Hitoshi et al. |
| US 5534355 A | 19960709 | Artificial multilayer and method of manufacturing the same | 428/811.3 | 257/E43.005; 324/252; 360/126; 360/324; 427/131; 427/547; 427/598; 428/212; 428/336; 428/635; 428/662; 428/667; 428/668; 428/672; 428/674; 428/680; 428/681; 428/900; 428/928 | Okuno; Shiho et al. |
| US 5523172 A | 19960604 | Magnetoresistance effect element | 428/611 | 257/E43.005; 428/635; 428/670; | Saito; Yoshiaki et al. |

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| | | | | 428/673; 428/675; 428/928 | |
| US 5500633 A | 19960319 | Magnetoresistance effect element | 338/32R | 257/E43.005; 324/252 | Saito; Yoshiaki et al. |
| US 5493465 A | 19960220 | Magnetoresistance effect element and magnetic recording apparatus | 360/324.1 | 257/E43.004; 324/207.21; 338/32R | Kamiguchi; Yuzo et al. |
| US 5484491 A | 19960116 | Ferromagnetic film | 148/313 | 420/435 | Iwasaki; Hitoshi et al. |
| US 5461527 A | 19951024 | Magneto-resistive head | 360/327.32 | | Akiyama; Junichi et al. |
| US 5416353 A | 19950516 | Netoresistance effect element | 257/421 | 257/425; 257/427; 257/536; 257/E43.004 | Kamiguchi; Yuzo et al. |
| US 5365212 A | 19941115 | Magnetoresistance effect element | 338/32R | 257/E43.005; 324/252 | Saito; Yoshiaki et al. |
| US 5329413 A | 19940712 | Magnetoresistance sensor magnetically coupled with high- coercive force film at two end regions | 360/327.32 | | Kondoh; Reiko et al. |
| US 5304975 A | 19940419 | Magnetoresistance effect element and magnetoresistance effect sensor | 338/32R | 257/E43.005; 324/252; 360/324 | Saito; Yoshiaki et al. |